# Commonwealth of Kentucky Division for Air Quality

# PERMIT APPLICATION SUMMARY FORM

Completed by: Sukhendu K. Majumdar

GENERAL INFORMATION:	
Name:	Marathon Petroleum Marine Repair Terminal
Address:	101 12th Street
	Catlettsburg, KY 41129
Date application received:	10/19/2006
SIC Code/SIC description:	4491/Marine Repair Terminal
Source ID:	21-019-00016
Source A.I. #:	35218
Activity ID:	APE20060001
Permit:	F-06-066
Termit.	1-00-000
APPLICATION TYPE/PERMIT ACTIVITY:	
[ ] Initial issuance	[ ] General permit
[ ] Permit modification	[X] Conditional major
Administrative	[ ] Title V
Minor	[ ] Synthetic minor
Significant	[ ] Operating
[X] Permit renewal	[X] Construction/operating
COMPLIANCE SUMMARY:	
<ul><li>[ ] Source is out of compliance</li><li>[ ] Compliance certification signed</li></ul>	[ ] Compliance schedule included
APPLICABLE REQUIREMENTS LIST:	
[] NSR [] N	SPS [X] SIP
[]PSD []N	ESHAPS [ ] Other
[ ] Netted out of PSD/NSR [ ] N	fot major modification per 401 KAR 51:001, 1(116)(b)
MISCELLANEOUS:	
[ ] Acid rain source	
[ ] Source subject to 112(r)	
[X] Source applied for federally en	forceable emissions cap
[ ] Source provided terms for altern	native operating scenarios
[ ] Source subject to a MACT stan	dard
[ ] Source requested case-by-case	112(g) or (j) determination
[ ] Application proposes new contr	col technology
[X] Certified by responsible official	1
[X] Diagrams or drawings included	1
[ ] Confidential business informati	
[ ] Pollution Prevention Measures	~~
[ ] Area is non-attainment (list pol	lutants):

#### **EMISSIONS SUMMARY:**

Pollutant	Actual 2005 emissions (tpy)	Potential (tpy)
PM/PM <sub>10</sub>	0.31	0.85
$\mathrm{SO}_2$	0.02	0.067
NOx	4.1	11.1
СО	3.43	9.45
VOC	2.94	<90
Single HAPs	None	<9.0
Source wide HAPs	None	<22.5

### **SOURCE DESCRIPTION:**

Marathon Petroleum Company LLC operates a Marine Repair Terminal (MRT) in Catlettsburg, KY. The facility submitted a Title V operating permit application in 1998, based on the potential-to-emit (PTE) for volatile organic compounds (VOC) of greater than 100 tons per year. The Title V permit was issued by the Division for Air Quality in December 22, 1999. A permit renewal application was submitted by the facility six months before the expiration of the permit in 2004. After several reviews of the application DAQ suggested to develop a calculation methodology to estimate barge "degassing" emissions during the barge cleaning cycle. Based on the new emission estimation, it was determined that the facility qualifies for the Federally Enforceable State Operating Permit (FESOP). Marathon Petroleum Company LLC submitted revised renewal application for Marine Repair Terminal at Catlettsburg on October 19, 2006.

The primary function of the Marine Repair Terminal is to clean and repair barges which are used to transport petroleum products in the water ways. On arrival at the MRT, the residual product barges is transferred into a storage tank and the barge is "degassed" using blowers. Degassing is considered the drying of gasoline and other petrochemical products from the barges. Depending on the prior barge service, vapors from the degassing are either routed to a natural gas fired thermal oxidizer for VOC destruction or to the atmosphere.

The Marathon Petroleum Marine Repair Terminal consists of:

- a) One natural gas fired boiler (#3 Boiler) to provide hot water to warm wash the barges.
- b) One natural gas fired thermal oxidizer to reduce VOC and HAP emissions.
- c) Two internal floating roof tanks to store and separate oil and water.
- d) Two internal floating roof tanks to store gasoline and #2 fuel oil.
- e) Three horizontal tanks used to store Distillate #2.
- f) One horizontal tank to store lube oil.
- g) One Barge Loading Station.
- h) One Barge Cleaning Station.
- i) Waste Water treatment plant.

The MRT used to perform painting and truck loading, but these operations are no longer performed in the location.

## **EMISSIONS AND OPERATING CAPS DESCRIPTIONS:**

Marathon Petroleum Company LLC Marine Repair Terminal has requested a Conditional Major Permit. Pursuant to 401 KAR 52:030, the facility shall maintain the VOC emission below 90 tons per year, single Hazardous Air Pollutant (HAP) shall be below 9.0 tons per year and combined HAPs shall be below 22.5 tons per year.

### **OPERATIONAL FLEXIBILITY:**

None.